

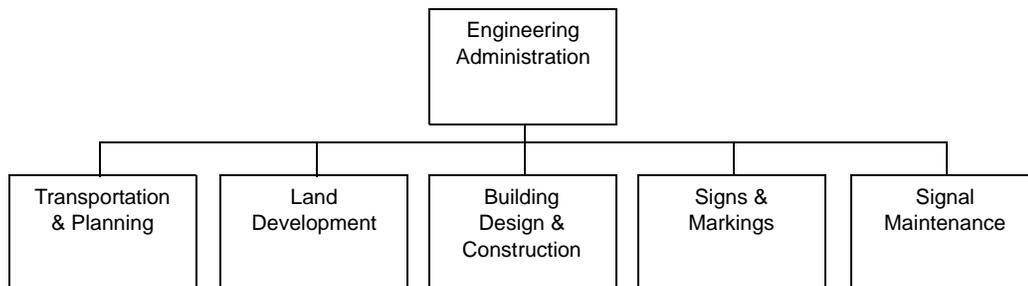
## Operating Budget

Category	FY 2008 Actual	FY 2009 Adopted	FY 2009 Forecast	FY 2010 Adopted
Personnel Services	6,990,689	7,867,389	7,991,705	7,486,780
Materials & Supplies	1,617,149	1,788,872	1,914,538	1,747,321
Capital Outlay	0	34,000	34,000	0
Total Expenditures	8,607,838	9,690,261	9,940,243	9,234,101
Program Revenue	(1,592,070)	(1,483,563)	(1,493,328)	(1,483,563)
Net Expenditures	7,015,768	8,206,698	8,446,915	7,750,538
<i>Funded Staffing Level</i>	151.42	151.42	147.13	144.00
Authorized Complement				146

## Mission

To provide quality engineering and project management to ensure properly planned, designed, and constructed public projects are delivered to the citizens of Memphis in a timely and cost-efficient manner.

## Structure



## Services

The City of Memphis covers an area of over 346.6 square miles that is connected by nearly 4,150 miles of roads. The Division of Engineering provides planning, design and construction administration to constantly improve and expand the City's infrastructure. The Division designs and manages the construction of all the City's capital projects. Engineering staff reviews all private development proposals to ensure the required public improvements are included.



## Issues & Trends

With the slow economy over the past budget years, the resources to fulfill our mission have been limited. The Engineering Division has been called upon to do more with less and we have responded. Solving drainage issues has placed increasing demands on divisional resources. However, the approved Storm Water Utility District will assist greatly in meeting the demand for drainage improvements throughout the city. Widening streets to provide additional capacity is becoming increasingly difficult and expensive. The utilization of Intelligence Transportation System (ITS) technologies to increase the efficiency and capacity of the existing transportation system is necessary now more than ever. Traffic monitoring and control capabilities to allow appropriate response to collisions, gridlock, malfunctions, etc., are necessary to keep traffic moving with minimal impact. The Engineering Division has developed plans for interconnecting signals to provide the backbone for these technologies.



## Strategic Goals

- Improve the CIP planning, budgeting and design process to ensure public facilities are constructed within original budget estimates
- Pursue grant funds to leverage City CIP funds.
- Adopt new policies to address flooding problems throughout the City
- Develop Intelligent Transportation System (ITS) strategies to monitor and control existing street network
- Provide on-street parking enforcement for areas of the City with meter parking
- Finalize Traffic Signal LED Modification of school flashers and signalized flashers



## Budget Highlights

- Increased revenue income by 7.3% (\$109,000) over budgeted amount in FY08
- Personnel expenses were reduced by 5.3% (\$395,000) in FY08 compared to budgeted amount.
- Tight internal controls reduced our material and supply expenditures in FY08 by 14.4% (\$273,000)



## Demand Measures

Square miles within City boundaries	346.6
Miles of roads within City boundaries	4,150
Street name and traffic control signs	300,000
Number of City Streets	6,750
Intersections	20,000
Miles of road re-striped	1,000
City Traffic Signals/Flashers	830
City Traffic School Flashers	140

County Traffic Signals/Flashers	229
County Traffic School Flashers	104

## FY 2009 Performance Highlights

- Positioned the City to receive \$45.5M in additional Federal grants through stimulus (ARRA) and STP funding over the next 3 years for road resurfacing, traffic signal improvements, roadway safety improvements and bicycle & pedestrian facilities
- Traffic signal malfunctions are being repaired within 12 hours of notification
- Repaired 100% of all stop and yield signs within 24 hours of notification
- Coordinated with the Tennessee Department of Transportation (TDOT) to facilitate improvements to key interchanges along the urban interstate system. Completed construction of the Walnut Grove/I-240 Interchange and the reconstruction of the I55/Mallory Interchange has commenced
- Coordinated with TDOT to complete the Walnut Grove / Humphreys Interchange. This project included the first elements of the proposed Wolf River Greenway
- Completed several studies and designs to address flooding problems throughout the City
- Began construction on 1 major roadway project
- Initiated studies and designs on numerous roadway projects
- Established the first segments of on-street bicycle lanes

## ■ charges for services

Category	FY 2008 Actual	FY 2009 Adopted	FY 2009 Forecast	FY 2010 Adopted
Subdivision Plan Inspection Fee	(309,886)	(385,000)	(385,000)	(385,000)
Street Cut Inspection Fee	(227,828)	(250,000)	(250,000)	(250,000)
Traffic Signals	(233,198)	(66,000)	(74,924)	(66,000)
Parking Meters	(476,873)	(580,000)	(580,000)	(580,000)
Signs-Loading Zones	(18,106)	(12,800)	(12,800)	(12,800)
Arc Lights	(4,823)	(4,000)	(4,000)	(4,000)
Sale Of Reports	(17,428)	(2,363)	(3,204)	(2,363)
MLG&W Rent	0	(400)	(400)	(400)
St TN Highway Maint Grant	(112,533)	(95,000)	(95,000)	(95,000)
Miscellaneous Income	(100)	0	0	0
Sidewalk Permit Fees	(191,295)	(88,000)	(88,000)	(88,000)
<b>Total Charges for Services</b>	<b>(1,592,070)</b>	<b>(1,483,563)</b>	<b>(1,493,328)</b>	<b>(1,483,563)</b>

## Operating Budget

Category	FY 2008 Actual	FY 2009 Adopted	FY 2009 Forecast	FY 2010 Adopted
Personnel Services	3,385,707	3,897,696	4,074,929	3,638,930
Materials & Supplies	468,752	383,240	418,428	363,879
Capital Outlay	0	34,000	34,000	0
Total Expenditures	3,854,459	4,314,936	4,527,357	4,002,809
Program Revenue	(1,479,537)	(1,483,563)	(1,493,328)	(1,388,563)
Net Expenditures	2,374,922	2,831,373	3,034,029	2,614,246
<i>Funded Staffing Level</i>	88.42	88.42	86.71	86.00
Authorized Complement				87

**Legal level consolidation of *Civil Design & Administration, Survey, Mapping & Property, Construction Inspections, Traffic Engineering and Building Design & Construction.***

**Description**

*To provide timely and quality engineering services in the design of civil works projects and the review of private developments to protect the safety of the public.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	822,459	1,065,814	1,092,302	985,204
Materials & Supplies	42,302	40,688	41,766	20,538
Total Expenditures	864,761	1,106,502	1,134,068	1,005,742
Program Revenue	(1,462,285)	(1,483,563)	(1,492,487)	(1,388,563)
Net Expenditures	(597,524)	(377,061)	(358,419)	(382,821)
<i>Funded Staffing Level</i>	19.42	19.42	19.55	19.00
Authorized Complement				19

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Develop roadway and drainage construction plans in a timely manner and comply with all applicable local, state and federal guidelines and policies	To execute design contracts for all Capital Improvement Program (CIP) projects when fiscal year funds are first allocated	Percent of CIP projects with executed contract first year	50%	100%	100%
	To complete design for all CIP projects within second year after funds are allocated	Percent of CIP plans signed by City Engineer second year	50%	100%	100%
	To complete design reviews, on the average, within 20 working days of submittal	Percent of CIP design reviews completed within 20 days	70%	80%	80%
Minimize the time taken to review land development submittals	To review contract type plans within 14 days of receipt	Average number of days to review contract type plans	9.3	10	10
		Percent of contract type plans reviewed within 12 days	71%	80%	80%



**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Improve delivery time of land development contracts to developers	To deliver contracts to developers within 10 working days of receiving a bondable set of plans from Plans Review	Average number of days to deliver land development contracts	15.5	18	15
		Percent of land development contracts delivered within 15 days	50%	70%	75%

**Description**

*To provide quality survey services so that accurate information is available to engineers using the data. Provide timely and accurate traffic counting so that engineers using the data can make better decisions.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	579,181	685,577	653,535	658,117
Materials & Supplies	78,110	58,038	58,188	59,327
Capital Outlay	0	30,000	30,000	0
Net Expenditures	657,291	773,615	741,723	717,444
<i>Funded Staffing Level</i>	16.00	16.00	15.08	15.00
Authorized Complement				15

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Extend vertical control survey network	To set 50 concrete survey markers and tie them into the vertical survey benchmark network	Number of vertical survey markers set	10	10	10
Establish horizontal control survey network	To set 50 new concrete survey markers and determine their horizontal coordinates	Number of horizontal control markers set	10	10	10
Provide timely traffic counting and speed study services	To complete any new speed hump traffic count requests within 15 days of receipt	Percent of new requests completed within 45 days	100%	100%	100%
Ensure adequate training of staff	To train each crewmember in each of the 4 areas of survey	Percent of survey shop crew members cross trained	100%	100%	100%

**Description**

*To maintain the official records of the City of Memphis regarding mapping and all properties acquired for public rights-of-way in order to serve the citizens and respond to requests for information about City-owned property.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	141,212	143,694	146,937	151,017
Materials & Supplies	11,124	17,000	17,200	17,000
Total Expenditures	152,336	160,694	164,137	168,017
Program Revenue	(17,152)	0	(841)	0
Net Expenditures	135,184	160,694	163,296	168,017
<i>Funded Staffing Level</i>	3.00	3.00	3.00	3.00
Authorized Complement				3

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Maintain up-to-date mapping and property information for the City of Memphis and disperse that information in a timely manner, as requested	To maintain up-to-date map annually	Percent of records updated within same calendar year	70%	70%	70%
	To serve all customers requesting information within 24 hours	Number of information requests	4,500	4,500	4,000
		Percent served within 24 hours	85%	80%	95%



**Description**

*To protect the public interest and City's investment in all public improvements through the inspection of all construction activities within public rights-of-way and easements.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	483,321	640,833	707,133	623,069
Materials & Supplies	229,619	180,937	213,666	180,937
Net Expenditures	712,940	821,770	920,799	804,006
<i>Funded Staffing Level</i>	22.00	22.00	22.00	22.00
Authorized Complement				22

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Properly inspect all assigned construction projects, maintain and document payments and project schedule dates	To complete pay request applications within 5 working days of monthly close date	Percent of pay requests processed within 5 days	98%	98%	99%
	To inspect all projects at least once a day when work is in progress	Average percent of days projects are inspected	100%	100%	100%
	To reduce the number of trench failures addressed by Drain Maintenance by 15 percent	Percent reduction in number of trench failures	15%	15%	18%
	To reduce projects exceeding the average days of project schedule by 15 percent, to be in compliance	Percent reduction in projects exceeding schedule	15%	15%	18%
	To inspect all street cuts done by MLG&W	Percent of street cuts inspected	90%	90%	92%

**Description**

*To improve safety and quality of life within the City of Memphis by providing design, operation and maintenance supervision services for all permanent and temporary traffic control devices within the public rights-of-way and ensure that these devices are utilized in accordance with the appropriate city, state and federal laws and standards.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	792,080	895,820	879,625	890,463
Materials & Supplies	82,180	61,497	62,060	60,997
Capital Outlay	0	4,000	4,000	0
Net Expenditures	874,260	961,317	945,685	951,460
<i>Funded Staffing Level</i>	19.00	19.00	18.08	18.00
Authorized Complement				19

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Provide a wide variety of traffic engineering services to promote the safe and efficient flow of traffic throughout the City of Memphis	To complete all Priority 4 in-house studies/ investigations within 8 weeks of assignment, allowing 4 weeks for the data collection by survey and 4 weeks for analysis/report	Percent of Priority 4 studies completed within 10 weeks	100%	100%	100%
	To complete traffic signal plan design by the assigned deadline	Percent of traffic signal designs completed by the deadline	100%	100%	100%
	To repair or replace broken parking meters within 48 hours of notification	Percent of meters repaired within 48 hours	100%	100%	100%
	To complete Land Development traffic control plan (TCP) review by assigned completion date	Percent of TCP reviewed by assigned completion date	100%	100%	100%



**Description**

*To provide quality engineering and architectural services in support of building projects of all City divisions so that facilities are provided for public use in a timely and cost-effective manner.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	567,454	465,958	595,397	331,060
Materials & Supplies	25,417	25,080	25,548	25,080
Total Expenditures	592,871	491,038	620,945	356,140
Program Revenue	(100)	0	0	0
Net Expenditures	592,771	491,038	620,945	356,140
<i>Funded Staffing Level</i>	9.00	9.00	9.00	9.00
Authorized Complement				9

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Expedite implementation of CIP projects	To execute design contracts for all CIP projects within the first 6 months of the fiscal year that funds are allocated and the written project is received from customer division	Percent of contracts with programs executed within 6 months	100%	100%	100%
	To execute design contracts within 60 days after written program is received from customer division	Percent of design contracts executed within 60 days	75%	75%	75%
	To complete design within 18 months from date funds and program are available for all projects \$4.0 million or less	Percent of projects with completed designs within 18 months	100%	100%	100%
Minimize design cost	To hold average design cost to 9% of total construction costs on projects	Average design cost percentage	8.50%	8.50%	9.00%

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Execute construction contracts in a timely and cost efficient manner	To execute construction contracts within 120 days of receiving bids	Percent of construction contracts executed within 120 days	98%	98%	98%
	To execute construction contracts within the original cost estimate	Percent of projects that bid within estimate	100%	100%	100%



**Description**

*To improve safety and quality of life within the City of Memphis by installing and maintaining proper signage and pavement markings for both pedestrian and vehicular traffic.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	1,721,825	1,906,573	1,893,751	2,000,323
Materials & Supplies	568,668	684,174	766,274	682,605
<b>Total Expenditures</b>	<b>2,290,493</b>	<b>2,590,747</b>	<b>2,660,025</b>	<b>2,682,928</b>
Program Revenue	(112,533)	0	0	(95,000)
<b>Net Expenditures</b>	<b>2,177,960</b>	<b>2,590,747</b>	<b>2,660,025</b>	<b>2,587,928</b>
<i>Funded Staffing Level</i>	30.00	30.00	29.08	29.00
Authorized Complement				29

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Maintain all signs and markings within the City of Memphis in a manner consistent with applicable standards	To repair all stop signs and yield signs within 24 hours of notification	Percent of signs repaired within 24 hours	100%	100%	80%
	To repair/install 4,000 traffic signs per sign crew	Number of traffic signs repaired/ installed	13,289	15,000	15,000
	To re-stripe all city streets annually	Number of street miles re-striped annually	1,451	1,181	1,000

**Description**

*Traffic Signal Maintenance works to increase the safety of pedestrians, motorists and goods movement by maintaining existing traffic signals and installation of new signals at intersections throughout the City of Memphis.*

**Operating Budget**

<b>Category</b>	<b>FY 2008 Actual</b>	<b>FY 2009 Adopted</b>	<b>FY 2009 Forecast</b>	<b>FY 2010 Adopted</b>
Personnel Services	1,883,157	2,063,120	2,023,025	1,847,527
Materials & Supplies	579,729	721,458	729,836	700,837
Net Expenditures	2,462,886	2,784,578	2,752,861	2,548,364
<i>Funded Staffing Level</i>	33.00	33.00	31.33	29.00
Authorized Complement				30

**GOALS, OBJECTIVES & PERFORMANCE MEASURES**

<b>Goal</b>	<b>Objective</b>	<b>Performance Measure</b>	<b>Actual FY 2008</b>	<b>Estimated FY 2009</b>	<b>Adopted FY 2010</b>
Properly install all traffic signals and signal devices within the City of Memphis	To complete installation of new signal locations within 2 months of assignment	Percent of signals installed within 2 months	100%	100%	100%
Maintain all traffic signal and signal devices within the City of Memphis	To conduct preventive maintenance on all traffic signals once per year	Number of signals maintained annually	446	800	800
	To repair all traffic signal malfunctions within 24 hours of notification	Percent of signals serviced within 24 hours	100%	100%	100%



# CITY ENGINEERING

# AUTHORIZED COMPLEMENT

Service Center/Position Title	Authorized Positions	Service Center/Position Title	Authorized Positions
<u>Civil Design &amp; Administration</u>		<u>Traffic Engineering</u>	
ADMR TRANS PLAN DESIGN	1	CLERK GENERAL A	1
ASST ADMINISTRATIVE	1	COLLECTOR METER	2
CLERK ACCOUNTING A	2	COORD ADA RAMP PROGRAM	1
CLERK GENERAL A	1	ENG DESIGNER A	1
COORD ADMIN SUPPORT	1	ENG DESIGNER AA	1
COORD LAND DEV	1	ENGINEER CITY TRAFFIC	1
DIRECTOR ENGINEERING DEPUTY	1	ENGINEER DESIGN	1
ENG DESIGNER AA	1	ENGINEER TRAFFIC	2
ENGINEER CITY CIVIL DESIGN	1	REPAIRER PARKING METER	1
ENGINEER CITY	1	SECRETARY B	1
ENGINEER DESIGN	1	SUPER PARKING METER REP	1
ENGINEER DESIGN SENIOR	3	TECH ENGINEERING AA	2
REVIEWER PLANS	1	TECH PARKING ENFORCEMENT	4
SECRETARY B	1	<b>Total Traffic Engineering</b>	<b>19</b>
SPEC DOCUMENT	1	<u>Building Design &amp; Construction</u>	
TECH ENGINEERING AA	1	ADMR BLDG DESIGN CONST	1
<b>Total Civil Design &amp; Administration</b>	<b>19</b>	CLERK GENERAL A	1
<u>Survey</u>		ENGINEER CIP COORDINATING	1
AIDE ENGINEER	3	MGR ENG PROJECT	5
CHIEF SURVEYOR PARTY	3	SUPER OFFICE ENG	1
CLERK GENERAL A	1	<b>Total Building Design &amp; Construction</b>	<b>9</b>
COUNTER TRAFFIC	5	<u>Signs &amp; Markings</u>	
MGR SURVEYOR	1	MGR STREET SIGNS MARK	1
OPER SURVEY INST	2	PAINTER	20
<b>Total Survey</b>	<b>15</b>	PAINTER APP	1
<u>Mapping &amp; Property</u>		PAINTER LO	1
SUPER MAPPING	1	SPEC FLAGMAN OFFICER	6
TECH ENGINEERING AA	2	<b>Total Signs &amp; Markings</b>	<b>29</b>
<b>Total Mapping &amp; Property</b>	<b>3</b>	<u>Signal Maintenance</u>	
<u>Construction Inspections</u>		AIDE SIGNAL	10
CLERK GENERAL A	1	CLERK GENERAL A	1
INSP ZONE CONSTRUCTION	16	DISPATCHER	1
MGR CONSTRUCTION INSP	1	MGR SIGNAL MNT CONST	1
SUPER CONSTRUCTION INSP	4	SPEC PROCUREMENT	1
<b>Total Construction Inspections</b>	<b>22</b>	TECH SIGNAL	16
		<b>Total Signal Maintenance</b>	<b>30</b>
		<b>TOTAL CITY ENGINEERING</b>	<b>146</b>

